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# The digital transformation of health and care can bring benefits to all Europeans

Cooperation in the field of smart health is more important and urgent than ever

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By 2030, Europe will be the oldest region in the world. Expenditure on health and long-term care has been going up in all EU Member States, and is expected to rise even further as a consequence of an ageing population. Despite bigger spending on health and long term care, increased longevity does not always mean a longer life in good health. Digital technology can transform health and care provision for the better, and the role of the European Union in this process is now more important than ever.

The health and care sector has traditionally failed to seize the potential of digital innovation, as it is a regulated field area with relatively high innovation costs. Public expenditure on health and care includes a share of spending that is inefficient. In the past, increased spending was often associated with improved health outcomes. Today the degree of improvement in health outcomes varies considerably across countries, and high spenders do not necessarily rank high in terms of improved health. For instance, Spain has the highest life expectancy but is an average spender compared to other EU countries.

In 2015, EU Member States spent 8.7% of GDP on health and long term care. By 2060 this is likely to reach 12.6% of GDP. However, increased spending does not necessarily lead to extra years of life spent in good health. Healthy life years (HLYs) – also called disability-free life expectancy – indicate the quality of life spent in a healthy state. Healthy life years are an important measure of the relative health and quality of life of populations and they have actually not increased in the EU. In fact, between 2010 and 2014 there has been a recorded decline in average HLYs in the EU-28.



## By 2018 an initial set of Member States will start exchanging e-prescriptions across borders.

technology brings to access health and care services. Every citizen should be able to access and securely share personal health information with trusted health and care providers anywhere in the EU.

At present the reality is different. EU citizens cannot share their health records when receiving emergency treatment after an accident in another Member State. They cannot make use of their e-prescription when they travel across borders. When they change their country of residence, their health and medical history is not transferred to their new health and care providers.

The European Commission is breaking new ground in this area together with Member States. By 2018 an initial set of Member States will start exchanging e-prescriptions across borders. But we would like to go further and give European citizens the right to access a comprehensive, easy-to-use and secure electronic health record supporting patient summaries and e-prescriptions in a portable, accessible and readable way by health care providers when travelling to or residing in another Member State.

### 2. Unlocking the power of data to personalise medicine

On the 23 March 2017 in Rome, seven Member States signed a joint declaration on high-performance computing which outlines a plan to establish an integrated world-class infrastructure capable of at least 1018 calculations per second (so-called exascale computers). This will be available across the EU for scientific communities, industry and the public sector, no matter where users are located. The potential of this initiative to personalise medicine and transform health and care in Europe is very significant.

For many health challenges, such as cancer, brain or genetic diseases, the fragmentation of data-sets across different systems in different regions or Member States limits the potential use for advancing scientific research. This means that despite the growing capacity

of digital technologies to process and analyse health data, progress in translating this potential into better health outcomes remains slow.

We need to bring cross-border cooperation in the field of digital health to a new level. This means harnessing the different resources at EU level for capacity-building and working with those willing to contribute at national and regional level. Strengthening EU cooperation and avoiding fragmentation will serve citizens, health professionals and national health systems. We want to realise this vision, placing people at the heart of digital health and care redesign.

### Conclusion

European cooperation in the field of digital health and care transformation is now more important and urgent than ever e.g. to pool EU resources and accelerate research in genetics or cancer treatment, or to develop a system to ensure that not only patient summaries but full health records are exchanged and patients can get treatment across borders when necessary. This network would harness the power of data exchange across the different ecosystems, digital and health, in a way that generates new knowledge and translates it into better care services, early diagnosis and treatment of disease across the EU. ■



**Roberto Viola**

Roberto Viola is Director General of DG CONNECT (Directorate General of Communication, Networks, Content and Technology) at the European Commission. He was the Deputy Director-General of DG CONNECT, European Commission from 2012 to 2015. Roberto Viola served as Chairman of the European Radio Spectrum Policy group (RSPG) from 2012 to 2013, as Deputy Chairman in 2011 and Chairman in 2010. He was member of the BEREK Board (Body of European Telecom Regulators), and Chairman of the European Regulatory Group (ERG). He held the position of Secretary General in charge of managing AGCOM, from 2005 to 2012.

### Kurz und bündig

Eine europäische Kooperation im Bereich digitale Gesundheit und Pflege ist heute dringender denn je. Nur so können EU Ressourcen verknüpft werden, die Genforschung und jene zur Behandlung von Krebserkrankungen beschleunigt werden oder auch ein System entwickelt werden, um vollständige Gesundheitsakten auszutauschen und Patienten auch grenzüberschreitend zu behandeln. Dieses Netzwerk impliziert den Datenaustausch über die Grenzen der beiden Ökosysteme ‚Digitalisierung‘ und ‚Gesundheit‘ hinweg. Neue Erkenntnisse entstehen, die dann EU weit in bessere Pflegedienste, Früherkennung und Behandlungen einmünden.